

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

COMPLETE LISTING OF CLAIMS:

Claims 1-7 : (Canceled)

Claim 8 : (New) A wavelength-selective optical signal processing device, comprising: an outcoupling filter for decomposing and incoming wavelength multiplex having a plurality of channels at different wavelengths into a first and a second group of channels; a processing unit for carrying out a processing of the first group to obtain a processed first group; and an incoupling filter for combining the processed first group and the second group into an outgoing wavelength multiplex; the outcoupling filter and the incoupling filter having a common continuous wavelength-selective reflecting structure operative for reflecting the first group from the incoming wavelength multiplex into a first direction and letting the second group pass in a passing direction, and also operative for reflecting the first group arriving from a second direction after having passed through the processing unit into the passing direction of the second group.

Claim 9 : (New) The signal processing device of claim 8, characterized in that the wavelength-selective reflecting structure is a Bragg grating.

Claim 10 : (New) The signal processing device of claim 8, characterized in that the wavelength-selective reflecting structure is a dichroic mirror.

Claim 11 : (New) The signal processing device of claim 8, characterized in that the channels include a plurality of information channels and at least one supervisory channel, and in that the at least one supervisory channel forms the first group, and in that the information channels form the second group.

Claim 12 : (New) The signal processing device of claim 8, and at least one optical amplifier stage passed through by the entire incoming wavelength multiplex.

Claim 13 : (New) The signal processing device of claim 12, characterized in that the at least one optical amplifier stage is transparent for the first group in an unpumped state.

Claim 14 : (New) The signal processing device of claim 8, characterized in that the device is a regenerating amplifier for an optical long distance cable.